

PATENT CLAIMS

1. Device comprising

a housing element (1) with a first thread;

and a second element (2) with a second thread (13), which is complementary to the first thread and is engaged therewith;

wherein the housing element and the second element are twistable relative to one another about the axis of the two threads, and the twisting causes a change of the axial position of one with respect to the other due to the pitch of the threads (13); and

a twist limiting feature, which limits the twistability of the housing element relative to the second element to an angular range, **characterized in that**

the twist limiting feature comprises two axial barriers (3, 14, 22), so that the axial position of the housing element relative to the second element is limited to a range between two extreme positions determined by the axial barriers.

2. Device as claimed in claim 1, wherein the axial barriers (3, 14, 22) are so arranged, that the difference between the extreme positions corresponds to the axial shift caused, for given thread pitch, by a twisting of the housing element (1) relative to the second element (2) by the maximum allowable angle of twist.

3. Device as claimed in claim 1 or 2, wherein the housing element (1) or the second element (2) includes at least two

cylindrical sections (10, 14, 20, 22) of differing radii, whose axis of rotation is aligned with the axis of the threads, wherein, between the at least two sections of differing radii, a radial step is formed, which serves as an axial stop surface for an axial barrier of the twist limiting feature.

4. Device as claimed in claim 3, wherein the housing element or the second element includes a cylindrical section, whose lateral surface includes an annularly running groove (22), which extends radially inwards and is bounded in the axial direction by first and second radial steps, wherein the first and second radial steps each serve for one of the two axial barriers.
5. Device as claimed in one of the claims 1 to 4, wherein the housing element or the second element includes at least one duct with cylindrical sections of differing radii, whose axis of rotation is aligned with the axis of the threads, wherein, between the at least two sections of differing radii, a radial step is formed, which serves as an axial stop surface for an axial barrier of the twist limiting feature.
6. Device as claimed in one of the claims 1 to 5, wherein the housing element or the second element includes a cylindrical duct, whose lateral surface exhibits an annularly running groove (14), which extends radially outwards (14) and is bounded in the axial direction by a first and a second radial step, wherein the first and second radial steps each serve as an axial stop surface for one of the two axial barriers.
7. Device as claimed in claim 6 and claim 4, wherein the twist limiting feature further comprises a coupling element (3), which is engaged both with the radially outwardly extending groove (14) and with the radially inwardly extending groove

(22).

8. Device as claimed in claim 7, wherein the coupling element comprises an annular washer (3).
9. Device as claimed in claim 8, wherein the annular washer (3) is radially flexible.
10. Device as claimed in one of the claims 7 to 9, wherein the radially inwardly extending groove has a first breadth in the axial direction, and the radially outwardly extending groove has a second breadth in the axial direction, wherein the axial thickness of the coupling element is selected such that the sum of the first breadth and the second breadth, minus twice the axial thickness, corresponds to the axial shift caused at the given pitch of the threads by a twisting of the housing element relative to the second element by the maximum allowable twist angle.
11. Device as claimed in one of the preceding claims, wherein the second element (2) comprises a sensor element.
12. Device as claimed in one of the preceding claims, wherein the housing element (1) includes a measurement transmitter housing, and the sensor element an industrial process measurement sensor, especially a pressure sensor, flow rate sensor, viscosity sensor, fill level sensor, pH-sensor or other potentiometric sensor, temperature sensor, moisture or humidity sensor, gas sensor or turbidity sensor.